

## **ASK 1 Polyclonal Antibody**

Catalog No: YT0370

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: ASK1

Fields: >>Platinum drug resistance;>>MAPK signaling pathway;>>Sphingolipid

signaling pathway;>>Protein processing in endoplasmic reticulum;>>Apoptosis;>>Tight junction;>>TNF signaling

pathway;>>Thermogenesis;>>Neurotrophin signaling pathway;>>Non-alcoholic fatty liver disease;>>Alcoholic liver disease;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Spinocerebellar

ataxia;>>Pathways of neurodegeneration - multiple diseases;>>Chemical carcinogenesis - reactive oxygen species;>>Lipid and atherosclerosis;>>Fluid

shear stress and atherosclerosis

Gene Name: MAP3K5

**Protein Name:** Mitogen-activated protein kinase kinase kinase 5

Q99683

O35099

Human Gene Id: 4217

**Human Swiss Prot** 

No:

Mouse Gene Id: 26408

**Mouse Swiss Prot** 

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

ASK1. AA range:932-981

**Specificity:** ASK 1 Polyclonal Antibody detects endogenous levels of ASK 1 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

1/3



**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 155kD

**Cell Pathway:** SAPK\_JNK; Regulation of Actin Dynamics; Cell Growth; Stem cell pathway;

Cell Cycle G1S;Cell Cycle G2M DNA;

MAPK\_ERK\_Growth;MAPK\_G\_Protein; B Cell Receptor

**Background:** Mitogen-activated protein kinase (MAPK) signaling cascades include MAPK or

extracellular signal-regulated kinase (ERK), MAPK kinase (MKK or MEK), and

MAPK kinase kinase (MAPKKK or MEKK). MAPKK kinase/MEKK

phosphorylates and activates its downstream protein kinase, MAPK kinase/MEK, which in turn activates MAPK. The kinases of these signaling cascades are highly

conserved, and homologs exist in yeast, Drosophila, and mammalian cells.

MAPKKK5 contains 1,374 amino acids with all 11 kinase subdomains. Northern blot analysis shows that MAPKKK5 transcript is abundantly expressed in human heart and pancreas. The MAPKKK5 protein phosphorylates and activates MKK4 (aliases SERK1, MAPKK4) in vitro, and activates c-Jun N-terminal kinase

(JNK)/stress-activated protein kinase (SAPK) during transient expression in COS

and 293 cells; MAPKKK5 does not activate MAPK/ERK. [provided by Re

**Function:** catalytic activity:ATP + a protein = ADP + a

phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Contains an N-terminal autoinhibitory domain. Activated by phosphorylation at Thr-838, inhibited by phosphorylation at Ser-966 and Ser-1033. Binds to, and stabilizes MAP3K6 and is activated by MAP3K6 by phosphorylation on Thr-838, function:Component of a

protein kinase signal transduction cascade. Phosphorylates and activates MAP2K4 and MAP2K6, which in turn activate the JNK and p38 MAP kinases, respectively. Overexpression induces apoptotic cell death.,induction:By TNF-

alpha. Inhibited by HIV-1 Nef., similarity: Belongs to the protein kinase

superfamily.,similarity:Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase kinase subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Homodimer when inactive. Binds both upstream

activators and dow

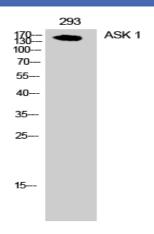
Subcellular Location:

Cytoplasm . Endoplasmic reticulum. Interaction with 14-3-3 proteins alters the distribution of MAP3K5/ASK1 and restricts it to the perinuclear endoplasmic

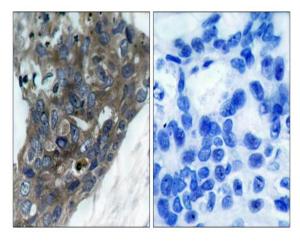
reticulum region.

**Expression :** Abundantly expressed in heart and pancreas.

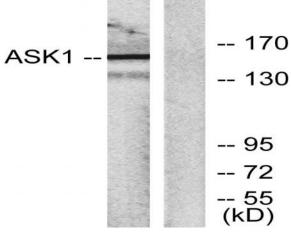
## **Products Images**



Western Blot analysis of 293 cells using ASK 1 Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using ASK1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from RAW264.7 cells, using ASK1 Antibody. The lane on the right is blocked with the synthesized peptide.